



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|------------------------------|------------------|
| 10/694,798 | 10/29/2003 | Shenshen Wu | 20002.0263B | 6082 |
| 23517 | 7590 | 04/15/2005 | | |
| SWIDLER BERLIN LLP 3000 K STREET, NW BOX IP WASHINGTON, DC 20007 | | | EXAMINER BUTTNER, DAVID J | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1712 | |

DATE MAILED: 04/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/694,798

Applicant(s)

WU ET AL

Examiner

David Buttner

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

The status of the parent applications must be updated at the beginning of the specification.

The lined out references on the 1449 form could not be located in the parent applications.

There is not support for "casted" the covers of claims 18-21 in 9-461736. These claims have an effective filing date of 11/27/00. Application 9-311591 does not support the MW's now claimed.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-17 rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Moriyama '396.

Moriyama exemplifies golf balls (table 1) having a core of BR-11(a high cis polybutadiene), zinc acrylate crosslinker, peroxide initiator and diphenyldisulfide.

Diphenyldisulfide is one of applicant's cis-to-trans catalysts (page 16 line 8). Inherently

BR-11 has a high MW (see Endo 6489401's description in table 2). Moriyama does not measure the trans gradient through his core. Presumably, Moriyama's core will have the applicant's trans gradient because the same materials and amounts are utilized. The cover can be polyurethane (col 3 line 62) with a thickness as little as 1mm (col 7 line 48). Use of a urethane cover on the exemplified core would at least be obvious, if not considered anticipated.

Claims 1-3,6-16 and 18-21 rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan '293 in view of Moriyama '856.

Sullivan exemplifies (table 9) golf balls having a core, a mantle and a casted urethane cover of Baytec RE832. The core is made of BR-1220 (a high cis polybutadiene), zinc diacrylate crosslinker, peroxide etc. (col 16 line 18-28). Inherently, BR-1220 has a high MW (see Nesbitt 6277920's description in table 2). Sullivan does not suggest the inclusion of organosulfur compounds such as diphenyldisulfide in his core.

It is known that inclusion of such organosulfur compounds improve golf ball cores (see Moriyama col 2 line 47-64). It would have been obvious to include such organosulfurs in Sullivan's core for the expected advantages. Note that Moriyama's "organophosphorous" is a misprint as the subsequently named species are sulfides.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-21 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-50 of U.S. Patent No. 6486261. Although the conflicting claims are not identical, they are not patentably distinct from each other because the patent also claims golf balls having a urethane cover and a core of high MW polybutadiene, free radical source and cis-to-trans catalyst. The claims of the patent do not call for a crosslinker, but it is well known in the art that crosslinkers (eg zinc acrylate) are normally necessary to cure polybutadiene golf ball cores. The examples of the patent indicate the presence of crosslinker is intended to be embraced by the claims. The currently claimed trans gradient appears to be merely an inherent property of the patent's claimed composition.

Claims 1-21 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-22 of U.S. Patent No. 6818705. Although the conflicting claims are not identical, they are not patentably distinct from each other because the patent also claims golf balls having a urethane cover and a core of high MW polybutadiene and cis-to-trans catalyst. The claims of the patent do not call for a free radical source and crosslinker, but it is well known in the art that peroxides and crosslinkers (eg zinc acrylate) are normally necessary to cure polybutadiene golf ball cores. The examples of the patent indicate the presence of peroxides and

crosslinker is intended to be embraced by the claims. The currently claimed trans gradient appears to be merely an inherent property of the patent's claimed composition.

Claims 1-17 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-62 of U.S. Patent No. 6465578. Although the conflicting claims are not identical, they are not patentably distinct from each other because the patent claims golf balls having the same core. The patent does not claim any particular cover, but it is clear from the specification (col 18 line 55) that urethane covers are intended to be encompassed by the claims.

Claims 1-21 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-17 of copending Application No. 10-694746. Although the conflicting claims are not identical, they are not patentably distinct from each other because the copending application claims essentially the same ball requiring a certain loss tangent instead of a trans gradient. Inherently both properties would be present because both of these properties are a function of the claimed composition.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-21 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-21 of copending Application No. 10-694800. Although the conflicting claims are not identical, they are not patentably distinct from each other because the copending application claims essentially the same ball requiring a certain dynamic stiffness instead of a trans

gradient. Inherently both properties would be present because both of these properties are a function of the claimed composition.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-21 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-21 of copending Application No. 10-694754. Although the conflicting claims are not identical, they are not patentably distinct from each other because the copending application claims essentially the same ball without requiring any trans isomer gradient through the core. It is clear from the instant specification that the trans gradient is an inherent property of the claimed core and would inherently be present.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-21 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-21 of copending Application No. 10-694801. Although the conflicting claims are not identical, they are not patentably distinct from each other because the copending application claims essentially the same ball requiring a certain resilience index instead of a trans gradient. Inherently both properties would be present because both of these properties are a function of the claimed composition.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Buttner whose telephone number is 571-272-1084. The examiner can normally be reached on weekdays from 10 to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski, can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David Buttner

DAVID J. BUTTNER
PRIMARY EXAMINER

4/7/05

David Buttner